

64. (Not Changed From Prior Version) An ink-jet printing apparatus for printing an image on a printing medium employing an ink-jet printing head capable of ejecting ink supplied from an ink tank, comprising:

negative-pressure loading means which is able to introduce negative pressure into the ink tank;

ink-supplying means for supplying ink into the ink tank using the negative pressure in the ink tank;

gas-liquid separating means which lies in a negative-pressure loading passage between the ink tank and the negative-pressure loading means and which permits gas to pass but inhibits ink from passing; and

disrupting means capable of disrupting a midcourse portion of the negative-pressure loading passage between the ink tank and the gas-liquid separating means.

65. (Not Changed From Prior Version) An ink-jet printing apparatus as claimed in Claim 64, wherein the disrupting means disrupts the midcourse portion of the negative-pressure loading passage at the time of supplying ink to the ink tank.

66. (Not Changed From Prior Version) An ink-jet printing apparatus as claimed in Claim 64, wherein the disrupting means has a connecting portion which connects the midcourse portion releasable.

67. (Not Changed From Prior Version) An ink-jet printing apparatus as claimed in Claim 64, further comprising:

moving means for moving the ink tank, wherein the disrupting means connects the midcourse portion of the negative-pressure loading passage when the ink tank is moved to a predetermined ink-supplying position, and disrupts the midcourse portion of the negative-pressure loading passage when the ink tank is moved away from the predetermined ink-supplying position.

68. (Not Changed From Prior Version) An ink-jet printing apparatus as claimed in Claim 67, wherein the moving means moves the ink-jet printing head together with the ink tank.

69. (Not Changed From Prior Version) An ink-jet printing apparatus as claimed in Claim 64, wherein the gas-liquid separating means is moved between the position for communicating with the inside of the ink tank and the position for never communicating with the inside of the ink tank.

70. (Not Changed From Prior Version) An ink-jet printing apparatus as claimed in Claim 64, further comprising:

wiping means for wiping the gas-liquid separating means.

71. (Not Changed From Prior Version) An ink-jet printing apparatus as claimed in Claim 64, wherein the gas-liquid separating means is an gas-permeable

membrane made of a material selected from a tetrafluoride ethylene resin and other porous resin materials.

72. (Not Changed From Prior Version) An ink-jet printing apparatus as claimed in Claim 64, wherein the ink-jet printing head is provided with electrothermal-converting elements that generate thermal energies as energies of eject ink.

77. (Not Changed From Prior Version) An ink-jet printing apparatus as claimed in Claim 64, wherein the gas-liquid separating means is provided with a member made of a porous material with an oil repellent finish.

78. (Not Changed From Prior Version) An ink-jet printing apparatus as claimed in Claim 77, wherein the gas-liquid separating means is an gas-permeable membrane made of a material selected from a tetrafluoride ethylene resin, a polyolefin resin, and other porous resin materials, which is subjected to an oil-repellent finish.

79. (Not Changed From Prior Version) An ink-jet printing apparatus as claimed in Claim 77, wherein the gas-liquid separating means is an gas-permeable membrane made of a material selected from porcelain, unglazed pottery, ceramic, and other porous materials, which is subjected to an oil-repellent finish.

REMARKS

Claims 64 to 72 and 77 to 79 remain pending in the application, with Claims 1 to 63, 73 to 76 and 80 to 125 having been canceled. Applicants respectfully submit that Claims 64 to 72 and 77 to 79 correspond to Species 3 (Figures 18 to 24) as identified in an Election of Species Requirement dated September 27, 2001 in parent Application No. 09/580,410. Favorable review and early passage to issue are respectfully requested.

Applicants' undersigned attorney may be reached in our Costa Mesa, California office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,


Attorney for Applicants

Registration No. 42,746

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-2200
Facsimile: (212) 218-2200

CA_MAIN 41767 v 1